

# The Tech

VOL. XXIV. No. 31.

BOSTON, MASS., WEDNESDAY, DECEMBER 7, 1904.

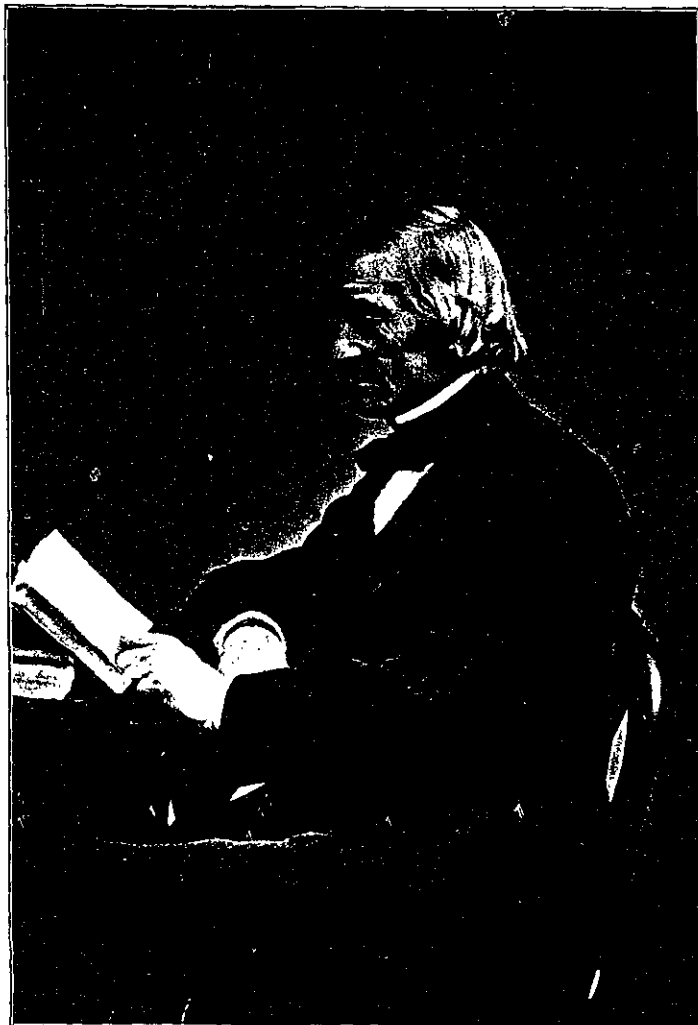
PRICE FIVE CENTS.

## Life of William Barton Rogers.

William Barton Rogers, founder and first president of the Institute, was born in Philadelphia, Dec. 7, 1804. The second son of Patrick Kerr Rogers, he and his three brothers,—all distinguished men of science,—were educated at the College of William and Mary, where their father was Professor of Natural Philosophy, and where William, at the age of twenty-four, succeeded him. Seven years later William Rogers was called to a similar chair in the University of Virginia. In the same year (1835), he was appointed head of the geological survey of Virginia, his brilliant work in science having already given him an international reputation. In 1846 he and his brother Henry formulated a "Plan for a Polytechnic School in Boston," which much influenced the Lawrence and the Sheffield Scientific Schools founded,—in connection with Harvard and Yale respectively,—not long thereafter. Convinced, however, that the educational and industrial needs of the time could be met only by a wholly independent school, Professor Rogers, soon after coming to Boston in 1853, joined the movement already begun by leading merchants and manufacturers of that city for the creation of such an institution; and from 1859 until his death—although for the greater part of that period an invalid—he gave his eloquence, his untiring energy, his rare wisdom, and finally life itself to the founding and up-building of the Massachusetts Institute of Technology.

Limited space forbids even an outline of this achievement of his which involved the convincing of the public and the legislature, the raising, during a time of war, of large sums of money, the working out of a new scheme of education, the creation of teaching laboratories, and the carrying forward, against poverty, misunderstanding and ceaseless opposition, of a costly and complicated educational experiment. For President Rogers and his associates aimed to establish and did indeed create much more than a school for technical training. They created an

(Continued on Page 4.)



WILLIAM BARTON ROGERS.  
Founder and First President of the Massachusetts Institute of Technology.

### Program of Today's Exercises.

The exercises to be held to-day at eleven o'clock in Huntington Hall will be for the Faculty and students alone, and will be of a simple character. The following is the program:

Introductory Address,  
Pres. Henry S. Pritchett.

Address,  
Pres. Lyon G. Tyler,  
William and Mary College.

Address,  
Prof. F. H. Smith,  
University of Virginia.

The Beginnings of the Institute,  
Prof. Robert H. Richards.  
Memoir of President Rogers, by Francis  
A. Walker, Third President of  
the Institute.

Read by Norman Lombard,  
of the Class of 1905.

### A Story of President Rogers.

Surely no one of his old time students has other than the pleasantest recollections of President Rogers. I can see him now as he used to appear at his lectures on Physics or Geology,—tall and slender, with the fine, strong, kindly face which is so well known even to younger Technology men from his photographs. He was always intensely interested in his subject, and his lectures were marvels of elegant and precise statement. They were more alive than any scientific lectures I ever heard. He took great interest in the oral examination which preceded the lecture, and often continued it until so late an hour, that in order to finish his lecture, he was obliged to considerably exceed his allotted time. These examinations were, I think, peculiar in that the object seemed to

(Continued on Page 3.)

## Beginnings of the Institute of Technology.

No student of the present day can feel the thrill of discovery in quite the same way as the first seven of us who were the nucleus of the embryo school. We were Professor Rogers' children on whom he tried his experiments in education; naughty children sometimes teasing our professors like other students, but I can truly say without malice. That was not possible with that gracious presence, dignified, polished, courteous, albeit with a twinkling eye, ever before us.

The beginning—for me it was the beginning of a new life, and in a greater or less measure it was the same for all the students of that first year. At the age of nearly twenty-one, early in February, 1865, I entered the new school, then a month old, seventh on the list, Eli Forbes having been the first. When we numbered fifteen, on February 20, we were graded into the semblance of classes. We found ourselves attending Rogers' lectures in Physics, illustrated on the blackboard by drawings and on the table by experiments. We spent hours in the chemical laboratory with Storer, where we actually did things with our *one* retort, and learned to observe, record, collate, and to draw conclusions from our experiments. In the drawing-room with Watson, we learned that wonderfully simple and universal method of thought expression drawing by which a Russian may communicate his ideas to an Italian, although neither knows the language of the other. With Runkle, we found that Mathematics had relations with every-day life. That we might avail ourselves of the literature of science, we learned modern languages with Bocher. This is what the Institute of Technology stood for, and what it did for us that first spring term in the old Mercantile Library on Summer Street (opposite Hovey's.) Winning the students and planning their work was not half the battle. Rogers had to persuade the community that the school they needed was the school his faculty had planned. The instruction of the

(Continued on Page 2.)

# The Tech

Published every Monday, Wednesday and Friday during the college year (from September to June), by students of the Massachusetts Institute of Technology.

Application pending for entry in the Boston Post-office as second-class mail matter.

## Editorial Staff.

CHARLES T. BARTLETT, 1906, *Editor-in-Chief*  
NORMAN LOMBARD, 1906, *Managing Editor*  
WALTER H. TRASK, 1906, *Secretary*  
J. DANIELS, 1905, L. T. BUSHNELL, 1905  
W. RANNEY, 1906, A. H. DONNEWALD, 1907

## News Staff.

R. E. BELL, 1905, W. G. WALDO, 1906.  
E. M. HARKER, 1907, R. P. LOWE, 1907.  
E. F. WHITNEY, 1907, W. F. DOLKE, 1908.

## Business Staff.

DONALD G. ROBBINS, 1907, *Business Manager*  
F. A. BENHAM, 1906, *Asst. Business Manager*  
M. McLEOD, 1907, *Asst. Business Manager*

Office: 30 Rogers Building, 491 Boylston Street

Hours: Editor-in-Chief..... 8:30-9 Daily  
Business Manager..... 8:30-9  
Managing Editor..... 8:00-9  
(News Bureau, Rogers Cor.) 1:00-2  
4:00-5

Contributions are requested from all undergraduates, alumni and officers of instruction. No anonymous manuscript can be accepted.

All communications regarding subscriptions or advertisements, should be addressed to the Business Manager.

Subscription - \$1.50 per year in advance.  
Single Copies 3 Cents.

In charge of this issue: J. DANIELS, 1905.

Wednesday, December 7, 1904.

WILLIAM A. NICHOLS, PRINTER, 208 SUMMER ST., REAR

THE TECH wishes to acknowledge contributions to this issue by the following gentlemen: R. H. Richards, '68; Eli Forbes, '68; J. P. Tolman, '68; C. R. Cross, '70; J. P. Munroe, '82.

To-day, as Technology students, we have the privilege of attending the exercises which are to commemorate the birth of William Barton Rogers, founder and first president of the Massachusetts Institute of Technology. We all know something of the efforts which President Rogers made to found a technical school, but we can only partly understand and respond to the difficulties and reverses which fifty years ago beset his attempts to organize what was then a unique experiment—namely, a broad and liberal education in pure and applied science. The commemoration is held in order that we of to-day may understand and appreciate more fully what the work of William Barton Rogers was, and that we may know something of the indomitable energy and of the spirit which made possible the education which we are striving to attain.

At the opening of the Centennial Commemoration at 11 A.M., the student body is requested to rise when the President, and members of the Corporation, and Faculty appear on the platform, and remain standing until they are seated.

## Some Reminiscences of President Rogers.

The first time that I met Professor Rogers was in 1867, when I came to Boston from the town which was my home to find whether I could enter the second year of the newly-established "School of Technology," and if it would give me the opportunity, which I could not find elsewhere in the country, to pursue the study of Physics as a specialty. I made my way to the temporary quarters then occupied by the Institute on Summer Street, and there introduced myself to the first person whom I met, who chanced to be Professor Runkle. There were no office clerks in those days of small things. I told Professor Runkle what I had studied in Mathematics, and he patted me on the shoulder and said, "I guess you will do," which constituted my entrance examination in that subject. I did not get off so easily, however, in Mechanics, then a first year subject, and Chemistry. On learning my wishes as to the study of Physics, Dr. Runkle said he would introduce me to Professor Rogers, who was in an adjoining room, and at the moment when we entered was in the act of asking a student to go to his house on Temple Place for a certain piece of apparatus. Temple Place had not ceased to be a residential street. I was both surprised and pleased at the benignant manner in which he dealt with me, with his readiness to speak with me at some length, and still more with the interest which he showed in my plans for study, and the encouragement which he gave me. I saw less of him as a student than later when an instructor, as he was prevented by illness from giving the lectures which I had looked forward to attending. It was the greatest regret of my student life that I was for that reason unable to hear his unequalled course on Geology.

President Rogers was a man of the utmost dignity of character and demeanor, and moreover of great cheerfulness. Through all the darkest days in the history of the Institute this cheerfulness never forsook him, and he showed the most magnificent courage when younger men were disheartened and downcast. He had a kindly, unassuming manner, and was always ready to listen to the views of others. He was always ready to listen to the views of others.

sent word that he could not come, and Professor Rogers asked me if I could not find something of interest which could be presented. Fortunately we had two new pieces of physical apparatus, one of them home-made, which were of general interest, and these were made to do duty as the subject of a lecture. Professor Rogers had seen neither of them before, and it was refreshing to witness his great enthusiasm when at the close of the paper, as was his habit, he spoke to those present of what was especially new in that which had been shown. To his latest days this quality of enthusiasm for anything new in science was most strongly marked. After the meeting was dismissed he observed, "Well, the Society of Arts sometimes falls, but it always comes down like a cat, on its feet!"

Professor Rogers would sometimes say, when we commented on the difficulties under which the Institute at that time labored for lack of instruments suitable for research, that one always had at his command "the instrument within his own cranium." The significance of the remark becomes very apparent if we note how many of the recent discoveries in physical science have been made with apparatus that was even then at the command of almost every physical laboratory,—for example, hysteresis, the high-frequency coil, the Hertzian waves, the coherer, the electrical effects of radiations of high refrangibility, the Röntgen rays, the radio-activity of uranium.

It will be interesting to many to know what was the extreme expectation of President Rogers as to the size to which the Institute might grow. He once told me that when the school was first opened he said that should it ever come to have as many as 250 students he would be satisfied and take his hat, make his bow, and leave. It had reached this number long before his death, but he little dreamed of the enormous growth in numbers, resources, and influence which the institution which he founded was to have in the twenty years following.

C. R. Cross, '70.

Prof. F. C. Smith.

Prof. F. H. Smith, of the University of Virginia, is one of the speakers at the memorial exercises.

Student of Natural Philosophy.

President Rogers.

favorite of

the

Square

(Continued from Page 1.)

masses was always dear to his heart, and the lecture was his favorite means of enlightenment. He also presented so forcibly to the community the claims of a technical school and the value it would prove to the public, that funds to establish it came in, although slowly.

His Society of Arts meetings became centres of interest for the leaders of scientific thought in Boston and gave him the influence he sought. Not infrequently an inventor would make a lame attempt to describe his invention, leaving the audience not quite sure what it was. Rogers, who had never before seen the machine, would in the clearest language and fewest words describe its construction, operation and use. But he did it in such a quiet way that the inventor went away supposing the words were his own.

The end of that first term found us twenty-eight in number; of these, thirteen stayed on into the fourth year, eleven were given degrees with three others who entered later, making the first graduating class of fourteen in 1868. The Faculty had doubled with the addition of Atkinson, Eliot, Henck, Osborne and Ware when the fall term of 1865 opened with an additional space in a dwelling house on Chauncy Street. In January, 1866, we came to this building, the Rogers Building, standing in lonely grandeur, a more fitting habitation than we then recognized for the New Education. Think of the boldness of this step! Such a fine, large structure for a school one year old and with only seventy-two students! Of the surroundings I may say that there were no buildings west of Berkeley Street except the Central Congregational Church. The tide rose and fell in an inlet where Trinity Church now stands. Horse cars came up Boylston Street at infrequent intervals as far as Clarendon Street. The neighboring open squares were used for our games of football, and the newly filled lands for our practice ground in surveying.

It is said that in 1865 there was not a single professor of Mechanical Engineering in any school in the United States, but although the early instruction would seem laughably meagre compared with the Institute's equipment to-day, one student, A. F. Hall, took his degree in that course in the first class, six in Civil Engineering, six in Geology and Mining, and one in Science and

JOHN (continued on Page 4)

The second general convocation of the year to be held one week from \_\_\_\_\_, will be addressed by Booker T. Washington.

**Life of William Barton Rogers.**

(Continued from page 1)

institution where high purpose and honest work are fundamental; where youth expect to behave and to labor like men; where for a vague, "imbibed" culture is substituted the real culture acquired through doing a hard task thoroughly, truthfully, and in a scholarly way; an institution which in the freedom from snobbishness among its students, in the spirit of co-operation among those students and between undergraduate and instructor, in the absence of rank lists, honorary degrees and other old-world inheritances, is a true democracy. President Rogers' further aim was to have the Institute become eventually a university based upon pure and applied science, but broadening into philosophy,—a true university, moreover, where, on the one hand, the advanced student should have every facility for probing the deepest scientific problems, and where, on the other hand, the humblest mechanic should find substantial educational help.

Dying at the graduating exercises May 30, 1882, President Rogers lived only long enough to see the Institute emerge from the doubt and extreme poverty of the experimental stage. But he had foreseen the extraordinary industrial development of the last twenty years in which Technology men have had so large a place, and he had planned an Institute broad enough to meet it. That those men have kept pace with the educational and industrial demands, that they have given the Institute its high reputation among colleges is because, through the teaching of the Faculty and through the traditions of the School, they have been imbued with the character of the Founder, who not only established the Institute of Technology but who created also the Technology atmosphere and spirit. Other college founders have endowed with money: Rogers gave something of far more worth,—himself.

J. P. MUNROE, '82.

**Beginnings of The Institute.**

(Continued from page 2)

No school is all study and books; personal character and conduct form the greater part of success in life. It will not be amiss to recall some of Rogers' methods of dealing with us by way of discipline.

Eli Forbes was ordered to report to the President. Rogers asked after the health of his father. Miles Standish, newly arrived in the school, occupied the seat to which another student thought he had a prior right; words and a slight disturbance followed; quick as a flash Professor Rogers started his gyroscope,—that curious toy which does everything you do not expect and nothing you do. It is needless to say Standish forgot his grievance.

When Rogers took us to visit the coal mine at Portsmouth, R. I., some of our class began playing cards on the train—at that day a reprehensible practice. Rogers came to the seat in front, and leaning over, gave the group an interesting talk on Geology; the game was forgotten.

One day the air became very close in the Summer Street lecture room, the boys, forgetful of their manners, yawned continually. Professor Rogers interrupted his lecture with the story of the German professor with whom yawning was contagious, and serious because it dislocated his jaw. Discovering this, his class used to take wicked advantage of their knowledge. "But" said Rogers, "young gentlemen, I do not suffer from that complaint."

One of my classmates describes Rogers as a most wonderful example of knowledge, of kindness, of wisdom and of eloquence. So full of zeal he was that the students must work to the limit of ability to please him. Thus was set the pace we have kept. But with all this knowledge he was intensely practical. That is, he had the true scientific spirit which brings all truth to the service of all.

As a teacher he was unrivalled for clearness of statement and elegance of expression. Added to the verbal

charm was a wonderful skill in blackboard illustration. Rapidity and accuracy were added to grace of line. His drawing of a perfect circle would always bring down the house in the Society of Arts. In a Lowell lecture, Rogers wishing to illustrate that a stream of water was not really a continuous stream, passed a sheet of paper quickly through the jet and holding it up to the audience distinctly saw just three wet spots.

To have divined the need of a coming age, to have persuaded a whole community to accept and support the new conception, to have influenced and moulded students and teachers into a working model so that consciously or unconsciously the superstructure is imitated by every successful scientific school in the English speaking world: this was the genius, this the title to fame of the Founder of Technology.

R. H. RICHARDS, '68.

**Mosely Educational Commission.**


The reports of the Mosely Educational Commission, which is the English Commission that visited the United States from October to

December, 1903, for the purpose of studying American educational conditions and methods, are extremely interesting. These reports take up in detail the various educational institutions of this country.

The Massachusetts Institute of Technology is often referred to, and the statements by various members of the Commission show that they were not only impressed with the system in use here, but were also made to realize by their personal observation the great importance of this institution to the American field of science. Mr. Blair, who visited all of the important technical institutions of the U. S. A., gives M. I. T. a very high ranking, and also shows that the average age of students studying at Technology compares very favorably with that of students at similar German institutions.

The reports also point out the value of scientific training, and in this connection give statements by the Rapid Transit Railroad Commissioners of New York and the Pennsylvania Railroad, together with a tabulated list of salaries earned by those men who graduated from M. I. T. in 1893.

"THE GIRLS ARE FOND OF THESE"



**Tech Emblems**  
Greatest Variety  
Lowest Prices

**BENT & BUSH**  
15 SCHOOL ST. BOSTON, MASS.

**WOODLAND PARK HOTEL**  
AUBURNDALE, MASS.


45 minutes by electric from M. I. T.  
Rooms singly or en suite, with or without private baths.  
Tennis, Golf, Canoeing; Superb Grounds and Admirable Cuisine.

**Banquets and Dinners a Specialty.**  
An ideal stopping place for visitors to M.I.T.

**FREDERICK WILKEY, Proprietor.**  
Send for Illustrated Booklet.

A PERFECT FOOD  
Preserves Health—Prolongs Life.

**Walter Baker & Co's**  
**Breakfast**  
**Cocoa.**



THE FINEST IN THE WORLD.

LOOK FOR THIS TRADE MARK.

Costs less than one cent a cup

43 HIGHEST AWARDS IN EUROPE AND AMERICA

**Walter Baker & Co. Ltd.**  
Established 1780. Dorchester, Mass.

**THE WALTHAM WATCH**

IS THE BEST  
IN THE WORLD

AMERICAN WALTHAM WATCH CO.

WALTHAM, MASS.

# EGYPTIAN DEITIES

No Better Turkish Cigarette can be made

CORK TIP  
OR PLAIN

Look for Signature  
of S. ANAGYROS



# HOTEL WESTMINSTER

COPLEY SQUARE

BOSTON : : : MASS.

W. M. ROWAN

"THE TECH BARBER"

Westminster Hotel . . . St. James Ave.  
SPECIAL TO STUDENTS  
HAIR CUT 25 CENTS SHAVE 15 CENTS

# Galvin's Conservatory

Cor. Boylston and Fairfield Sts.

Decorations for Weddings  
and Receptions. Dinner-  
table and Ballroom deco-  
rations. . . . .

Plans and Estimates Furnished  
on Application.

Durant Reed Co.  
CAMBRIDGE

# HATS

10%  
to Tech Students  
AGENTS FOR HALL & HANCOCK

# FOR SASH CORD, TRANSMISSION ROPE, etc. SAMSON SPOT CORD



SAMSON CORDAGE WORKS,  
BOSTON, MASS.

# Avery Chemical Co.

# DYE STUFFS AND CHEMICALS

LARGEST MANUFACTURERS OF LACTIC  
ACID IN THE WORLD

ALAN AVERY CLAFLIN, Superintendent

Boston

Montreal

Chicago

# D. A. YOUNG & CO.

FURNACES  
REGISTERS  
and VENTILATORS

# ROOFERS and METAL WORKERS

Slate and Gravel Roofing

COPPER AND GALVANIZED IRON CORNICES,  
GUTTERS, CONDUCTORS,  
SKYLIGHTS, etc.

Galvanized Iron Work in connection with Steam  
Fitting a Specialty

255 ATLANTIC AVENUE . . . BOSTON

Phone, Main 4832

S. W. WILDER, Treas.

H. HOWARD, Vice-Pres.

**MERRIMAC CHEMICAL CO.**

Manufacturing  
Chemists 

OFFICES

**75-77 BROAD STREET****BOSTON, MASS.****STONE & WEBSTER**

Electrical Experts  
and Engineers

**84 STATE ST., BOSTON, MASS.****TWO FAMOUS TRAINS**

There are two trains leaving Boston daily for the West that are not excelled in equipment or character of service in all New England.

The "CHICAGO SPECIAL," via Lake Shore, leaving Boston 10.45 A.M., due Chicago next day at noon, carries Buffet, Smoking and Library Car, equipped with Bathroom, Barber Shop and Booklovers' Library; Pullman Drawing-room Sleepers, and affords unexcelled Dining Car service en route.

The "NORTH SHORE LIMITED," via Michigan Central (Niagara Falls Route), leaving Boston 2 P.M., due Chicago 3 o'clock next day, is similarly equipped, and service is of the same high order. It depends only on the hour one wishes to leave or arrive, as to which is the better service.

The route from Boston is over the

**BOSTON & ALBANY R.R.**

through the picturesque BERKSHIRE HILLS district, thence over the NEW YORK CENTRAL through the famous Mohawk Valley.

For descriptive literature, call on

**R. M. Harris, 366 Washington St.**

**A. S. HANSON, Gen. Pass. Agt., Boston**

**9 TRAINS A DAY**

Leave BOSTON for the WEST via NEW YORK CENTRAL LINES

**5+00<sup>A</sup>** "Albany Local." Connections for points in New York State.

**8+30<sup>A</sup>** "Albany Express." Saratoga and New York State. Parlor Car to Saratoga.

**10+15<sup>A</sup>** "Berkshire Express." Parlor Car to Albany and Buffalo.

**10+45<sup>A</sup>** "Chicago Special." via Lake Shore; also Pittsburg, Cincinnati, St. Louis, Sleepers and Dining Car.

**2+00<sup>P</sup>** "North Shore Limited." Detroit, Grand Rapids, Chicago, Cincinnati. Sleepers and Dining Car.

**3+32<sup>P</sup>** "Western Express." Niagara Falls, Detroit, Cleveland, Chicago. Pullman Sleepers.

**6+02<sup>P</sup>** "Southwestern Express." Buffalo and Chicago. Dining Car and Sleepers.

**8+00<sup>P</sup>** "Pacific Express." Buffalo and Chicago and St. Louis. Pullman Sleepers.

**11+45<sup>P</sup>** "Albany Local." New York State. Sleepers to Albany.

\*Daily. †Except Sunday. ‡Except Saturday.

**THROUGH SLEEPING CAR AND DINING CAR SERVICE COMPLETE**

The Boston & Albany R.R., with its double track system, gives the finest train service out of New England, and the route lies through the picturesque Berkshire Hills, Mohawk Valley, via Niagara Falls.

For advertising matter, call on R. M. Harris, 366 Washington St., Boston.

A. S. HANSON, Gen. Pass. Agt., Boston

# The National Shawmut Bank

## OF BOSTON

**NOVEMBER 10, 1904****CAPITAL . . . . \$3,500,000.00****SURPLUS and PROFITS . 3,473,301.18**

*Depository of the United States, Commonwealth of Massachusetts, and City of Boston*

The business of financial institutions, corporations, partnerships, individuals, and trustees is solicited.  
The large resources of the Bank available for the use of its customers in all branches of sound and conservative banking.



**GEORGE W. BROWN****Merchant  
Tailor****110 TREMONT STREET**

Makes up-to-date students'  
clothes at very reasonable  
prices

**Suits and Overcoats from \$35**

This is the best time of the ENTIRE YEAR, for you to have your FULL DRESS, Tuxedo, or Double-breasted Frock Suit made. We make a Specialty of these garments and make Special Prices during the slack season. Then again, we have an extra large assortment at this time, and the Tailors always make their work better when not rushed with work and we are willing to figure a little closer to keep our help busy. Step in and let us show them to you. And oblige

Yours Respectfully,

**BURKE & CO.**  
**Tailors**

843 Washington Street, Boston  
1246 Massachusetts Avenue, Cambridge

*That Totally Different  
Clothing for Men*

**Made to Order**  
**Ready to Wear**  
**Automobile**

**SMITH & SMULLEN CO.****16 SUMMER STREET**

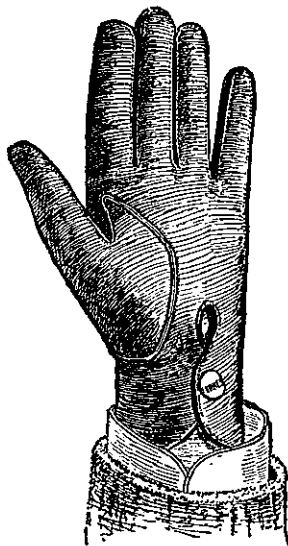
Near Washington Street

**Hotel Lenox**

**Boylston and Exeter Streets**  
**Back Bay, BOSTON**

ONE OF THE FINEST MODERN  
FIRE PROOF HOTELS IN THE  
COUNTRY. TWO MINUTES'  
WALK FROM THE BACK BAY  
STATIONS, AND ONE BLOCK  
FROM COPLEY SQUARE

CHARLES A. LILLISON, *Manager*  
Send for illustrated booklet

**GLOVES**

Fownes Bros. & Co., London, and Perrin's  
make, France.

**Men's, Young Men's and Ladie's Gloves.**

Fownes' Heavy Walking Gloves, Hand Sewn, \$1.50.

Gloves for Street, Driving, Dress and Traveling.

Men's and jCadets' sizes, \$1.50 to \$3.00.

Coachmen's Gloves.

Correct Gloves for all Dress Occasions.

**NOYES BROTHERS**

Washington and Summer Streets,  
Boston, Mass., U. S. A.

**A. H. MATZ & CO.,**  
**Merchant Tailor,**  
**32 HUNTINGTON AVENUE.**  
Telephone 1336-3 Back Bay.  
Contract Pressing by the Month.

**Military Science.****BATTALION OFFICERS.**

The following officers for the 1908  
Cadet Battalion have been ap-  
pointed:

Ames, W. O., Adjutant; Heath,  
A. W., Quartermaster.

COMPANY A: Carter, H. L., Cap-  
tain; Thode, A. L., First Lieutenant;  
Pfiffer, J. S., Second Lieutenant;  
Allen, H. E., First Sergeant; Perry,  
F. O., Second Sergeant; Caldwell,  
W. E., Third Sergeant; Cary, B. W.,  
Fourth Sergeant; Griswold, H. W.,  
Fifth Sergeant.

COMPANY B: Gerrish, H. T., Cap-  
tain; Dolke, W. F., First Lieutenant;  
Whitten, C. E., Second Lieutenant;  
French, H. W., First Sergeant;  
Hersey, M. D., Second Sergeant;  
Cassiday, H. A., Third Sergeant;  
Skillings, A. E., Fourth Sergeant;  
Coleman, N. L., Fifth Sergeant.

COMPANY C: Almy, E. T., Cap-  
tain; Pope, J., First Lieutenant;  
Gardner, A. L., Second Lieutenant;  
Emery, A. G., First Sergeant; Joy,  
C. F., Second Sergeant; Hall C. A.,  
Third Sergeant; Mason, W. H.,  
Fourth Sergeant; McAuliffe, W. J.,  
Fifth Sergeant.

COMPANY D: Coffin, L., Captain;  
Elton, H. C., First Lieutenant; Ham-  
mond, N. L., Second Lieutenant;

Established 1874

**DURGIN, PARK & CO.**  
**Market Dining Rooms**  
30 North Market & 31 Clinton Streets  
**BOSTON**  
OPEN FROM 5 A.M. TO 7 P.M.

Allen, M. E., First Sergeant;  
Luffkins, C. L., Second Sergeant;  
Gibbons, C. A., Third Sergeant;  
Butler, J. W., Fourth Sergeant;  
Sewell, H. R., Fifth Sergeant.

Approved,

HENRY S. PRITCHETT,  
*Pres. M. I. T.*

The Commissioned Officers of the  
Battalion are requested to meet in  
37 Rogers, at 1 P.M., Thursday,  
December 8, to consider the ques-  
tion of uniforms.

Owing to general convocation on  
Wednesday, December 14, drill will  
begin at 2.30 P.M., sharp, instead of  
2.00 P.M.

FRED WHEELER,  
*Major, U. S. A.*

**Corrected Notice Gas and Fuel  
Analysis.**

Dr. Gill will give four lectures  
on "Gas and Fuel Analysis for  
Engineers," in Room 23, Walker,  
from 4 to 5 P.M., on December 20,  
21, 22 and 23, instead of on Decem-  
ber 13, 14, 15 and 16, as announced  
before.

Students will report for this sub-  
ject in Room 38, Walker, in accord-  
ance with the schedule posted in the  
Applied Mechanics Laboratory, in  
Eng. A.

A. H. GILL.

**COES & YOUNG**

20 SOUTH ST. BOSTON

**Copley Square  
Hotel**

Huntington Ave. &amp; Exeter St.

PATRONAGE of "Tech" students  
solicited in our Cafe and Lunch Room

The attention of Secretaries and  
Banquet Committees of Dining  
Clubs, Societies, Lodges, etc., is  
called to the fact that the Copley Square  
Hotel has exceptionally good facilities  
for serving Breakfasts, Luncheons or  
Dinners and will cater especially to  
this trade.

Amos H. Whipple, Proprietor

*E. Chichering*  
*Co.*

**LEADING PHOTOGRAPHERS**  
21 West Street  
SPECIAL RATES TO STUDENTS OF THE INSTITUTE

**T.E. Moseley & Co.**

**CORRECT STYLES IN**  
**HIGH AND LOW CUT**  
**FOR**

**Fall and Winter Wear**

Prices, \$3.50 to \$8.00

GYM. SHOES \$1.75 AND \$2.25

**145 Tremont St.**

Between Temple Pl. and West St.  
**BOSTON**

10 Per Cent Discount to Tech

**KEEPS!**

SPECIALISTS in SHIRTS to order,  
as well as all Men's Wear, such as Hosiery,  
Underwear, Tailor-made Suits, Rain Coats,  
etc., all at popular prices.

Laundry Called for and Delivered

**KEEP MFG. CO.**

Makers of Keep's Shirts

**156 TREMONT STREET**

All Goods Required by  
Students at

**MacLachlan's****214 Clarendon Street.**

Writing Instruments and Materials, etc.  
Fountain Pens, Text-books.



**Style 176**  
TAN STORM OX.  
WING TIP, DOUBLE  
SOLE, WITH LACINGS  
OR STRAPS, \$4.00

**WEAR THE**  
*Walk-Over*  
**SHOE**

**\$3.50 AND \$4.00**

**A. H. HOWE & SONS**  
170 TREMONT STREET, COR. MASON  
BOSTON

College Shoes  
In great variety

**GARRISON HALL**

GARRISON and ST. BOTOLPH STREETS

AMERICAN AND EUROPEAN PLANS

—CUISINE THE BEST—

SPECIAL LOW RATES TO STUDENTS ON APPLICATION

GEORGE R. HOWARD

**DR. W. J. CURRIER**  
**DENTIST**

OFFICE HOURS 9 TO 4  
90 HUNTINGTON AVENUE  
Refers by permission to Prof. T. H. Bartlett

**Vegetarian Restaurant,**  
555 BOYLSTON ST., BOSTON.  
Next to Back Bay P. O.

**The Old Corner Bookstore,**  
Incorporated.  
27-29 Bromfield Street,  
Boston, Mass.  
**LOWEST PRICES.**

**Go to Hitchcock's**  
Huntington Avenue, corner  
West Newton Street... for  
**Drugs and Prescriptions**

**Priest's Dining Rooms**  
102 DARTMOUTH STREET

Full Ticket, 21 meals . . . . .	\$4.00
Breakfasts and Dinners . . . . .	3.00
Breakfast, 7 meals . . . . .	1.50
Dinner, 7 meals . . . . .	1.50

Try Our Mid-Day Dinners, 20 Cents  
Seven for \$1.20.

Telephone 1192-5 Oxford

**GEO. H. LANE**

*Importing  
Tailor . .*



18 BOYLSTON STREET,  
BOSTON, MASSACHUSETTS



DISCOUNT TO STUDENTS

A. G. Morse, Salesman.

**CALENDAR.**

WEDNESDAY, DECEMBER 7.

8.00 P.M. Meeting of Boston Branch  
A. I. E. E. Papers on "Problems  
of Heavy Electric Traction."

8.00 P.M. Technology v. B.U. at Gym.

THURSDAY, DECEMBER 8.

4.00 P.M. Basket Ball practice at the  
Gymnasium.

8.00 P.M. Chemical Society Meeting at  
the Tech Union. Speakers: Dr.  
Mulliken and Mr. Kneeland.

8.00 P.M. Public Library Lecture,  
"Early Renaissance of Italy," by  
C. Howard Walker.

8.00 P.M. Society of Arts Meeting, 22  
Walker. Speaker: Mr. E. O.  
Hovey.

**Wanted.**

One or more young men to check  
waiters' slips in a Back Bay Hotel  
in return for meals. Hours, 7-8.45  
A.M., 12.30-2 P.M. and 6-7.30 P.M.  
Apply Dean's office.

**Basket Ball.**

First game with Boston Univer-  
sity at the Gymnasium to-night.

Tech opens its basket ball season  
to-night at the Gymnasium, when it  
lines up against the Basket Ball  
Team of Boston University. For  
the past three weeks Tech has been  
practising hard. The number of  
men who are out for the team is  
quite large and there is much good  
material.

There will be but one other home  
game before Christmas, after the one  
to-night. This will, therefore, be the  
only chance to see the team play  
before it meets Dartmouth, Brown,  
and Holy Cross in games away from  
home.

The second team also plays to-night  
at the Gymnasium, when it meets  
English High School. Tickets for  
the games to-night are twenty-five  
cents each. Season tickets are sold  
at one dollar and a quarter and are  
good for all the home games, six or  
more.

**Society of Arts.**

A meeting will be held Thursday,  
December 8, at 8 P.M., in 22 Walker.  
Mr. Edmund Otis Hovey, of the  
American Museum of Natural His-  
tory, New York, will address the  
Society on "Mont Pelee and the  
Eruptions of 1902; the Growth of  
the Wonderful Spine." Students  
are invited.

The Boston Branch of the Ameri-  
can Institute of Electrical Engineers  
will hold its eighth regular meeting  
Wednesday evening, Dec. 7, 1904,  
at 8 o'clock, in the Lowell Building.  
A paper, "Problems of Heavy  
Electric Traction," by O. S. Lyford  
and W. N. Smith, will be reviewed  
and discussed.

**Chemical Society.**

The Chemical Society will hold a  
meeting on Thursday, December 8,  
at 8 o'clock, at the Union. Dr.  
Mulliken will speak on "Denatur-  
ized Alcohol in the Arts," and Mr.  
Kneeland will speak on "Swiss  
Universities." Tickets may be ob-  
tained from officers of the Society;  
price 20 cents.

The Lunch Room will be open  
to-day.

**Theatre Attractions**

BOSTON MUSIC HALL.—Vaudeville.  
CASTLE SQ.—"The Cavalier."  
COLONIAL.—Mme. Schumann Heink in  
"Love's Lottery."  
GLOBE.—"The Ninety and Nine."  
HOLLIS.—E. H. Sothern and Julia Marlowe.  
Second week. "Much Ado About Nothing."  
MAJESTIC.—Bertha Gelland in "Dorothy  
Vernon of Haddon Hall."  
PARK.—Amelia Bingham in "The Climbers."  
FREMONT.—"The Yankee Consul."

**HERRICK TICKETS** \* \* \*  
**ALL THEATRES**

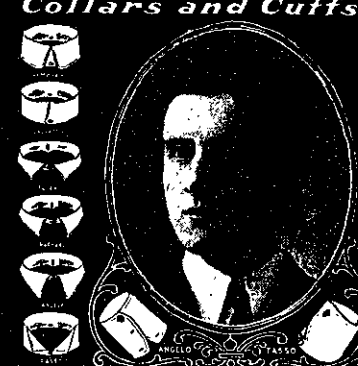
Copley Square

Telephone  
2329, 2330 and 2331 Back Bay

**MEADOWBROOK RESTAURANT**  
24-26 HUNTINGTON AVENUE

Huntington Chambers Building, near Copley Square

REVERSIBLE  
*Linene*  
Collars and Cuffs



**Save Money and Trouble**  
Students, professional and business men,  
mechanics, sportsmen, find comfort, con-  
venience and economy in these goods.  
Made of fine cloth, stylish, and finished in  
pure starch.

**NO WASHING OR IRONING**  
When soiled, discard. For sale by Conti-  
nental Clothing House, Boylston and Wash-  
ington Streets, and other dealers.

REVERSIBLE COLLAR CO., BOSTON

**C. F. HOVEY & CO.**  
Men's Furnishing Goods.  
Custom Made Shirts a Specialty.  
33 Summer Street  
42 Avon Street **BOSTON.**

**CAMPBELL  
CATERING  
COMPANY**  
408 and 410 Boylston St.  
LUNCH COUNTER,  
RESTAURANT and FANCY BAKERY,  
Ice Cream, Soda, Etc.  
Table d'Hote and a la Carte Dinners  
a Specialty.  
Long Distance Telephone 21740 Back Bay.



**The Berkeley Hotel**

BERKELEY AND BOYLSTON STREETS  
European and American Plans  
Modern in Every Detail  
Restaurant, Room table d'hote  
Café a la Carte, Dining Room  
Gentlemen's Cafe and Billiard Room  
Entrance on Berkeley St.  
**JOHN A. SHERLOCK**